

I. AMENDMENTS

AMENDMENTS TO THE CLAIMS

Please enter the amendments to claims 1-17, as shown below.

1. (Currently amended) A recombinant Recombinant Modified Vaccinia Vaccine Ankara (MVA) virus based on MVA, preferably a recombinant MVA virus, comprising at least one nucleic acid coding for a *Plasmodium falciparum* merozoite surface protein-1 (MSP-1) MSP-1 protein or a fragment or mutein thereof, a fragment or a mutein of it.
2. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 1, characterised in that wherein the MSP-1 protein is the MSP-1 protein of the isolate 3D7 or the MSP-1 protein of the FCB1 strain.
3. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 1 or 2, characterised in that, wherein the fragment is selected from the fragments p83, p30, p38, p33, p19 and p42 or combinations thereof of them.
4. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 1, wherein one of the Claims 1 to 3, characterised in that the mutein is differentiated from the MSP-1 sequence by addition, deletion, insertion, inversion and / or substitution of one or more amino acids.
5. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 1, wherein one of the Claims 1 to 4, characterised in that the nucleic acid coding for MSP-1 is reduced in its AT content compared to the wild type sequence.
6. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 1, wherein one of the Claims 1 to 5, characterised in that the nucleic acid coding for MSP-1 is under the control of a promoter.

7. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 1, wherein one of the Claims 1 to 6, characterised in that the nucleic acid at the 5' end is fused with a nucleotide sequence coding for a signal peptide sequence.

8. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 7, characterised in that wherein the signal peptide sequence controls the secretion of the gene product.

9. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 7, characterised in that wherein the signal peptide sequence controls the localisation of the gene product relevant to the membrane.

10. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 7, characterised in that wherein the signal sequence controls the GPI anchoring of the gene product.

11. (Currently amended) A method Method of production of a recombinant Modified Vaccinia Vaccine Ankara (MVA) virus virus based on MVA, wherein the method comprises the steps:

a) transfecing [[of]] a eukaryotic host cell with a transfer vector, wherein
i) the transfer vector comprises a nucleic acid encoding a Plasmodium falciparum merozoite surface protein-1 (MSP-1) MSP-1 protein, a nucleic acid encoding or a fragment or a mutein thereof, wherein the mutein differs [[-]] by the addition, deletion, insertion, inversion and / or substitution of one or more amino acids [[-]] from the MSP-1 sequence; and optionally also comprises a selection marker;

ii) the nucleic acid according to i) is flanked by MVA sequences 5' and / or 3', wherein the sequences are suitable for the homologous recombination in the host cell;

b) infection with a virus based on MVA, preferably MVA;
c) cultivation of the host cell under conditions suitable for homologous recombination; and
d) isolation of the recombinant virus based on MVA.

12. (Currently amended) The method Method according to Claim [[10 or]] 11, characterised in that wherein the virus is isolated from the culture supernatant or from the cultivated host cells.

13. (Currently amended) A vaccine ~~Vaccine~~ comprising:

- a) the recombinant virus according to one of the Claims 1 to 9; and
- b) a pharmacologically compatible carrier.

14. (Currently amended) The vaccine ~~Vaccine~~ according to Claim 13, ~~characterised in that the vaccine also contains as constituent~~ further comprising: c) MSP-1, a fragment or a mutein ~~thereof~~ of it and / or a nucleic acid coding for MSP-1, or a fragment or mutein thereof one of them.

15. (Currently amended) The vaccine ~~Vaccine~~ according to Claim 14, ~~characterised in that~~ wherein the constituents a) and c) can be administered simultaneously, sequentially or separately.

16. (Currently amended) A method ~~Use of the recombinant virus according to one of the~~ Claims 1 to 9 for the prophylaxis and / or therapy of malaria, ~~the method comprising administering the recombinant virus of any one of claims 1 to 9.~~

17. (Currently amended) A method ~~Use of the recombinant virus according to one of the~~ Claims 1 to 8 and of MSP-1, a fragment or a mutein of it and / or a nucleic acid coding for them for the prophylaxis and / or therapy of malaria, ~~the method comprising administering:~~ i) a recombinant virus according to one of claims 1 to 8; and ii) MSP-1, a fragment or a mutein ~~thereof and / or a nucleic acid coding for MSP-1, or a fragment or mutein thereof.~~